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The effects of the Unifying Creative-Meditation Technique as a treatment of self-reported Anxiety in Romanian Amateur Drivers

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Abstract

There are many ways of improving driving, but recently the researchers revealed that lower anxiety and aggression correlated with high skills seems to be the key of an efficient safety driving. In this study we are trying to prove the effect of the UCM technique on reducing the drivers anxiety and to reveal a link between reducing anxiety and improving performance. The participants were 30 drivers (for the experimental group) and 30 drivers (for the witness group) that have been selected from our Department's students. The subjects had been part of the experimental group were asked to have the driving license for minimum one year. Instruments: The physiological measures.
Results: The research was conducted on a period of two months and the results were tested using SPSS statistical analysis program by applying the T test procedure. The T test for independent samples was applied for testing the mean of the experimental and the witness group.
Conclusions: Considering this results we can say that the Unifying Creative Meditation Technique have a significant effect on reducing drivers anxiety all this reflecting on a high level on safety and performance in driving.

Keywords: driving anxiety, Unifying Creative Meditation Technique , safety driving

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1. Introduction

One of the most common problem, that negatively influences the activity of driving is driving anxiety. This can manifest both in relation to the activity as a whole or to a specific elements. Modern driving conditions can be very powerful stress factors that intensifie and enhance through special driving conditions (snow, rain, fog, congestion, etc..) or through road events as incidents or accidents.

The cumulative effect of stress agents involved in the process of driveing can lead to a number of issues with implications for the health and proper functioning of the individual. People suffering from phobic disorders in relation to this activity exhibit a range of symptoms that affect their ability to drive a vehicle or endanger their safety.

Driving anxiety can also be the result of post-traumatic disorders. Those who suffer from such disorders have panic attacks which manifest unexpectedly, making driving almost impossible. Some of those involved in car accidents develop driving anxiety as a result of the previous experience. Flashbacks, lack of confidence, irritability, anxiety are indicators of phobic disorders that manifest while driving. Marks IM, in his work, "Fears, Phobias and Rituals" in 1987, describes a series of indicators of driving phobia: heart palpitations, malaise, chest pain, rapid breathing, dizziness, a feeling of unreality, weak feet, sweating, dry throat, impaired hearing. Driving phobia differs fundamentally from anxiety, it being only a part of the phobia (Marks, 1987).

According to Professor Laurențiu Mitrofan phobia is characterized as a strong irrational, fear, accompanied by psychophysiological events that are triggered in the presence of an object or a particular situation that disrupts behavior and personal conduct on a long-term, as the author says, lead to maladjustment on the interpersonal, professional or social levels. Ambulofobia, or fear of driving a vehicle can significantly affect both the professional and the social sphere, but more than that it can lead to heightened risks for other road users and for the driver which suffer a phobic event (Metrophanes & Dumitrache, 2010). A study published in 2006 made an incursion into the symptoms, diagnosis and behavioral indicators of anxiety behind the wheel, with the participants of a sample of women who reported such features. The results of this study were related to previous incidents and accidents, and special driving situations where driving conditions are more demanding. Some of the findings revealed by this study refer to social stereotypes involved in the growth of driving anxiety in the case of women (Taylor, Deane, & Podd, 2006). Furthermore, Golu & Gâtej (2003) highlithed that attention has a statistically significant role in regulating driving behaviour, Burtăverde Chraif & Pandele (2013). Highlited the differences between topographic memory and gestalt perception according to one eye vs. two eyes visual processing in youngsters, Aniței & Dumitrache (2013) evidence corrlations between personality traits and aggressively behaviour at youngsters, Gâtej (2013a) evidenced the disturbing factors of dynamics interfering with car driving behaviour, Gâtej (2013b) showed the driving anxiety as challenge in driver behaviour, Golu & Gâtej (2013) evidenced the role of attention in regulating driving behaviour, Niculicea (2010) made an experimental design evidencing the aggression in traffic simulation task in Prahova Valley, Romania, Sârbescu (2013) underlined the displaced aggression in Romania investigated the psychometric properties of the Displaced Aggression Questionnaire on Romanian sample.

2. Objectives and Hypothesis

2.1. Objectives

In this study we are trying to prove the effect of the UCM technique on reducing drivers' anxiety and to reveal a link between reducing anxiety and improving performance.

2.2. Hypothesis

There are statistically significant differences in the level of anxiety as measured by self-report as a consequence of a training program based on the meditative-unifying model and computer simulation.

3. Research Methods

3.1. Participants

The participants were 30 drivers (for the experimental group) and 30 drivers (for the control group) that have been selected from our students department.

3.2. Instruments

State-trait anxiety inventory STAI was developed by Spielberger in 1968. It consists of two self-assessment scales for measuring two distinct concepts regarding anxiety: state anxiety (A-state) and trait anxiety (A-trait) (Spielberger , Gorsuch & Lushene, 1970).

Scale Y-1 feature consists of 20 descriptions (example: I feel calm, I feel secure) on which people express how they feel in general on a scale of 1-5 where (1-almost never; 5-almost always). Scale Y-2 state also has 20 descriptions (example: I feel pleasant, I feel rested) but the instructions require the subjects to indicate how they feel at a given moment on a scale of 1- 5 where (1-almost never, 5-almost always). Researchers can use the A-state to determine current levels of anxiety induced by stressful experimental procedures or as an indicator of the level of self-control (Spielberger, Gorsuch & Lushene, 1970).

3.3. Procedure

The participants were 30 drivers (for the experimental group) and 30 drivers (for the control group) that have been selected from our students department. The subjects of the experimental group were reqired to have a driving license for minimum one year.

4. Results

Researchers can use the A-state to determine current levels of anxiety induced by stressful experimental procedures or as an indicator of the level of self-control (Spielberger, Gorsuch & Lushene, 1970).

Tabel 1. Descriptive statistics for the all variables of study (stais 1, stais 2, stais eg.gr, stais ctrl.gr)

Variable	M	SD
Stais 1	44,5	3,02
Stais 2	53,5	5,40
Stais Ex.gr.	43,6	2,22
Stais Ctrl. gr.	48,7	1,56

Stais ex. gr.= STAI experimental group;Stais Ctrl. gr= STAI control group;Stais 1= testarea 1 STAI;Stais 2= testarea 2 STAI

In Table 1 we can see the averages and standard deviations for the studied variables. According to the questionnaires it can be seen that the first testing (Stais 1) obtained a mean of (M = 44.5, SD = 3.02) the second testing (Stais 2) obtained a mean of (M = 53 , 5, S = 5.40). Further, we can see the mean and standard deviation for the experimental group (M = 43.6, SD = 2.22) and the control group (M = 48.7, SD = 1.56)

Table 2. Independent t test and paired t test for studied hypotheses

Variable	M1	M2	t	Sig.
Stais1 Ex. Gr-Stai 2 Ex. Gr.	44,5	53,5	-4,50	.001
Stais Ex. Gr.-Stai Ctrl. Grp	43,6	48,7	-8,07	.000

Based on the results shown above, the research hypothesis that assumes improvements in the effectiveness of attention for participants in a training program based on unifying creative meditation is accepted for a sample of 80 subjects. Results on the "anxiety-state " scale were significantly improved after attending the training program based on creative meditation and computer simulation (M1 = M2 = 53.50 44.5, t = -4.5 and p <0.05). Data revealed by the table above accept the existence of significant differences between the experimental sample subjects (participants in a creative meditation technique-based training and computer simulation) and control subjects sample components (M1 = 43.6, M2 = 48 7, t = -8.07, p <0.05). Taking into account the results shown above, the research hypothesis that will show improvements in the efficiency of attention when participating in a training program based on unifying creative meditation is accepted for a sample of 80 subjects. sResults on the "anxiety-trait" scale were significantly improved after attending the training program based on meditation and creative computer simulation (M1 = 43.60, M2 = 48.7, t = -8.07, p <0.05).

If the "STAI-trait " scale the results compared between the two samples are as follows:

Data revealed by the above table confirm the hypothesis which assumes the existence of significant differences between the experimental sample subjects (participants in a creative meditation technique-based training and computer simulation) and control sample subjects components (M1 = 43.6, M2 = 48.77 , t = -5.81, p <0.05,

5. Conclusion

Unifying creative meditation is a technique tha has the potential to make significant improvements in reducing anxiety in all states and forms. By combining computer simulation, we are witnessing a real implementation, an iterative verification of progress and purchases made through the MCU technique. This holistic formula of multidirectional intervention seems to be the optimal form of intervention so as to make the subject availabile to practice this activity. For a finer analysis of this parameter, we included in our study two physiological parameters which positively correlate with anxiety: pulse rate and blood pressure.

As stated above, unifying creative meditation (MCU) is a special type of meditation. It falls partly in the form of meditation through inner perception. These forms are characterized by growing awareness and attention at all times in relation to the present experience. MCU is a process of transcending ordinary consciousness, focused only on causal interactions, thus becomeing more than a technique ment to relieve aggression and anxiety and provides beneficial alternative to these conditions that can disrupt consciousness and human activity.

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